



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/639,677	08/13/2003	Fernando Cuervo	ALC 3414	6127
76614	7590	02/12/2009		
Kramer & Amado, P.C. 1725 Duke Street Suite 240 Alexandria, VA 22314				
EXAMINER				
SURVILLO, OLEG				
ART UNIT		PAPER NUMBER		
2442				
MAIL DATE		DELIVERY MODE		
02/12/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/639,677

**Applicant(s)**

CUERVO ET AL.

**Examiner**

OLEG SURVILLO

**Art Unit**

2442

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on November 12, 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,6,8,9,11-13 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,8,9,11-13 and 17-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. Claims 1, 2, 6, 8, 9, 11-13, and 17-20 remain pending in the application. Claims 1, 2, 6, 8, 9, 11-13, and 17-20 are currently amended. Claims 3-5, 7, 10, and 14-16 have been canceled. No new claims have been added. It is noted that status identifier of claims 17 and 18 indicates that claims are previously presented, wherein the claims appear to be currently amended. For the purposes of examination claims 17 and 18 will be treated as "currently amended". In their next submission, applicants are encouraged to verify that the status identifiers for all claims are correct.

### ***Response to Arguments***

2. With regard to applicants' remarks dated November 12, 2008:

regarding the rejection of claims 1-3, 6, 8-14, and 17-20 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement, applicants' arguments have been fully considered, but they are not persuasive with respect to claims 1-3, 6, 8-14, and 19-20. Applicants' arguments with respect to claims 17 and 18 are persuasive. In particular, as to claims 1 and 9, applicants argue that par. [0018] and Fig. 2 provide a clear support for the limitation of "at least one first PDP". However, it is noted that PDP disclosed in the specification is not a claimed "Policy Description Protocol (PDP)" (emphasis added), but instead is a "Policy Decision Point (PDP)". Therefore, the specification fails to provide a clear support for the Policy Description Protocol, as claimed. In addition, applicants failed to provide a clear support in the

specification for each limitation of the claimed subject matter underlined at page 5 of the last Office action. Therefore, the rejection is maintained with respect to claims 1, 2, 6, 8, 9, 11-13, and 17-20.

As to claims 17 and 18, applicants argue that “...*Figure 3 depicts a main PEP and two virtual PEPs, the virtual PEPs corresponding to service x and service y. Thus, while the “first and second” PEPs, respectfully corresponding to services x and y, are defined as virtual, the main PEP may not be virtual*”. This argument is persuasive.

Therefore, the rejection of claims 17 and 18 has been withdrawn.

Regarding the rejection of claims 1-3, 6, 8-14, and 17-20 under 35 U.S.C. 112, second paragraph, applicants’ arguments have been fully considered.

As to claims 1, 9, 19, and 20, applicants argue that “...*as disclosed in paragraph [0009], the overall apparatus establishes services that utilize policy enabled resources*”. This argument is not persuasive because it is not clear how can the claimed overall apparatus establish services that utilize policy enabled resources if none of the claimed elements of the apparatus, alone or in combination, appear to perform said establishing. Recited par. [0009] merely repeats the original claim language and therefore fails to support applicants’ argument. Therefore, the rejection is maintained.

As to claims 1 and 9, applicants argue that “...*Figure 2 depicts “decoupling of policy management and resource management”. In addition, paragraph [0017] discloses separation of the management of policies from the management of policy enabled resources*”. However, applicants failed to clearly identify which one of the claimed elements performs the policy management and which of the claimed elements performs

the management of policy-enabled resources, such management being decoupled. The fact that Fig. 2 and par. [0017] may disclose separation of the management of policies from the management of policy enabled resources is not sufficient to clearly identify which ones of the claimed elements actually perform such management. Therefore, the rejection is maintained.

As to claims 1 and 9, applicants amended claim 1 to replace "at least one first policy description protocol (PDP)" with "a first policy description protocol (PDP)". Therefore, it is now clear to which PDP "said first PDP" (emphasis added) refers to. Thus, the rejection of claim 1 has been withdrawn. Applicants are advised to amend claim 9 analogously to claim 1 by replacing "at least one first policy description protocol (PDP)" with "a first policy description protocol (PDP)".

As to claim 3, the rejection is moot since the claim has been canceled.

As to claim 6, applicants' amendment has been fully considered and is sufficient. Therefore, the previously-made rejection has been withdrawn.

As to claim 8, applicants' amendment has been fully considered and is sufficient. Therefore, the rejection has been withdrawn.

As to claim 9, applicants' amendment to replace "another domain" with "said second domain" has been fully considered and is sufficient. Therefore, the rejection has been withdrawn.

As to claim 10, the rejection is moot since the claim has been canceled.

As to claim 11, applicants argue that "...the main PEP corresponds to the main PEP depicted in Figure 3". This argument is not persuasive because whether or not the

main PEP corresponds to that in Figure 3 is irrelevant. It is still unclear whether "a main PEP", as claimed, is one of the "first and second PEPs" of claim 9 or "a main PEP" is an additional PEP. Therefore, the rejection is maintained.

As to claims 12 and 13, applicants' amendment has been fully considered and is sufficient. Therefore, the rejection has been withdrawn.

As to claim 14, the rejection is moot since the claim has been canceled.

As to claims 19 and 20, applicants' amendment has been fully considered and is sufficient. Therefore, the rejection has been withdrawn.

As to claims 17 and 18, applicants argue that "said" has been deleted. However, Examiner fails to see such amendment, as per claims 17 and 18. Therefore, the rejection is maintained.

Regarding the rejection of claims 1, 2, 6, 8, 17, and 19 under 35 U.S.C. 101, applicants' arguments have been fully considered but they are not persuasive. Applicants argue that "...the apparatus is a computer, a particular machine programmed in a new and non-obvious way to establish services that utilize policy-enabled resources in a communications network". This argument is not persuasive because it is directed towards an unclaimed feature of the invention. In particular, the limitation of the apparatus being a computer, a particular machine programmed to establish services that utilize policy-enabled resources in a communications network, is not currently claimed. Therefore, applicants' argument cannot be held as persuasive.

As to any arguments not specifically addressed, they are the same as those discussed above.

**Specification**

3. The specification is objected to under 37 CFR 1.75(d)(1) as failing to provide a clear support or antecedent basis in the description for newly presented and amended claims, as discussed below with respect to the written description requirement.

**Claim Rejections - 35 USC § 112**

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1, 2, 6, 8, 9, 11-13, and 17-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

In particular, the newly added limitations of claim 1 (and substantially claim 9) read: "... said first resource policy layer including at least one first policy description protocol (PDP), wherein said first NRC initiates association between said first PEP and said at least one first PDP, and said first PDP provides said first PEP with a policy upon establishment of said association between said first PEP and first PDP, and wherein when said first NRC requires resources from a second domain outside the first domain, said first NRC signals a request to a second said NRC in said second domain, which initiates association between a second said PEP in said second domain and said first

PDP, said first PDP providing said second PEP with a policy upon establishment of said association between said second PEP and said first PDP" (emphasis added).

Regarding the newly added limitations of claims 1 and 9, Applicants argued that: *"claims 1 and 9 have been amended to recite that the network resource controller (NRC) enables contact between the policy enforcement point (PEP) and a policy description protocol (PDP), and further to recite the use of the NRC to enabling control of a second PEP in a second domain by the first PDP in the first domain, as illustrated in Fig. 2 and described for example in paragraph [0017] of the original specification"*. However, the cited paragraph [0017] of the original specification does not provide sufficient support for *"the use of the NRC to enabling control of a second PEP in a second domain by the first PDP in the first domain"*. Out of all the newly added limitations, as to claims 1 and 9, paragraph [0017] provides a clear support only for the limitation of *"wherein when said first NRC requires resources from a second domain outside the first domain, said first NRC signals a request to a second said NRC in said second domain"*. See par. [0017] lines 16-17.

As a result, claims 1 and 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

Dependent claims 2, 6, 8, 11-13, 17, and 18 are rejected under 35 U.S.C. 112, first paragraph, as being dependent from corresponding independent claims, as discussed above.

If Applicants believe that newly added limitations of claims 1 and 9 are fully supported by the original specification, in their next response the Applicants are



required to provide a clear support for newly added limitations, the citation to relevant portions of the specification being as specific as possible for each limitation. Among other limitations, clear support is required for the limitation of "at least one first policy description protocol (PDP)" (emphasis added).

As to claims 19 and 20, these claims are rejected for analogous reasons, as discussed per claims 1 and 9. If Applicants believe that the limitations of newly added claims 19 and 20 are fully supported by the original specification, in their next response they are required to provide a clear support for the claimed subject matter, the citation to relevant portions of the specification being as specific as possible for each limitation. Among other limitations, clear support is required for the limitation of "at least one first policy description protocol (PDP)" (emphasis added).

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1, 6, 9, 11, 17, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 1, 9, 19, and 20, it is unclear which element(s) of the claimed apparatus perform(s) the functionality of "establishing services that utilize policy-enabled resources", as disclosed in the preamble. In particular, a first policy enforcement point (PEP) identifies policy-enabled resources and allocates resources to

services. A first network resource controller (NRC) requests from available resource any resources required to establish a service. A first resource policy layer (RPL) provisions, to a service being established, the policy-enabled resources allocated to that service (emphasis added). Thus, none of the first PEP, the first NRC and the first RPL is shown to actually perform "establishing services", as disclosed in the preamble. Therefore, it is unclear how the claimed apparatus and method performs its intended function, being establishing services that utilize policy-enabled resources in a communications network.

As to claims 1 and 9, it is further unclear how "decoupling of policy management from the management of policy-enabled resources", as specified in the "whereby" clause, is achieved in the claimed invention. In particular, it is unclear which of the claimed elements performs the policy management and which of the claimed elements performs the management of policy-enabled resources, such that management of each is "decoupled".

As to claim 6, it is unclear whether "a second domain" is the same "second domain" recited in claim 1; and whether "a second PEP" is the same "second PEP" recited in claim 1. Applicants are encouraged to use proper antecedent basis when referring to the same elements in the claim. Such as, "a second domain" and "a second PEP" in claim 6 should be replaced with "said second domain" and "said second PEP".

Claim 9 recites the limitation "at least one first PDP" in the claim body. It is unclear to which one of the at least one first PDP "said first PDP" refers to in the instance when there are multiple first PDPs.

As to claim 11, it is unclear whether "a main PEP" is one of the "first and second PEPs" of claim 9 or "a main PEP" is an additional PEP.

8. Claims 17 and 18 recite the limitation of "said particular service" in the claim body. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 101***

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. Claims 1, 2, 6, 8, 17, and 19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As to claim 1, use of the word "an apparatus" does not inherently mean that the claim is directed to a machine. Only if at least one of the claimed elements of the apparatus is a physical part of the machine can the apparatus be a machine within the meaning of 35 U.S.C. 101.

In the instant case, no physical parts of the apparatus have been claimed. In particular, the apparatus of claim 1 recites a first policy enforcement point (PEP), a first network resource controller (NRC) and a first resource policy layer (RPL), all being

functional entities, each performing corresponding function, as evidenced by the specification at paragraph [0017]. Therefore, the apparatus of claim 1 fails to provide at least one physical part of the machine, and is rejected under 35 U.S.C. 101 for failing to fall within a statutory category of the invention as being directed to an apparatus of software per se. Specifically, it is noted that the first policy enforcement point (PEP) is interpreted to comprise a plurality of virtual PEPs, as evidenced by claim 2. Therefore, the first PEP is not a physical part of the apparatus.

As to claims 2, 6, 8, and 17, none of these claims introduce at least one physical part that would make an apparatus of claim 1 statutory under 35 U.S.C. 101. Therefore, these claims are rejected for the same reasons.

As to claim 19, use of the word "an apparatus" does not inherently mean that the claim is directed to a machine. Only if at least one of the claimed elements of the apparatus is a physical part of the machine can the apparatus be a machine within the meaning of 35 U.S.C. 101.

In the instant case, no physical parts of the apparatus have been claimed. In particular, the apparatus of claim 19 recites a first network resource controller (NRC), a virtual first policy enforcement point (PEP), and a resource policy layer (RPL), all being functional entities, each performing corresponding function, as evidenced by the specification at paragraph [0017]. Therefore, the apparatus of claim 19 fails to provide at least one physical part of the machine, and is rejected under 35 U.S.C. 101 for failing

to fall within a statutory category of the invention as being directed to an apparatus of software per se.

### ***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **OLEG SURVILLO** whose telephone number is (571)272-9691. The examiner can normally be reached on M-Th 8:30am - 6:00pm; F 8:30am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner: Oleg Survillo  
Phone: 571-272-9691

/Andrew Caldwell/  
Supervisory Patent Examiner, Art  
Unit 2442